

Remarks

Prior to this amendment, claims 1-44, 46-54, and 67-69 were pending in this application. Claims 1, 4, 5, 7, 9, 10, 11, 14, 18, 20, 21, 25, 34, 37, 43, 44, 46, 50, 68, and 69 are amended herein. New claims 70-72 are added. After entry of this amendment, **claims 1-44, 46-54, and 67-72 are pending in this application.**

Claims 1, 4, 5, 7, 9, 14, 18, 20, 21, 34, 37, 43, 44, 46, 68, and 69 were amended to ensure language consistency among the claims. Claim 11 was amended to correct matters of form. Claim 44 was amended to correct dependency.

Support for new claims 70 and 71 can be found in original claim 34. Support for new claim 72 can be found in the specification at least at page 19, lines 6-9, and in original claims 40 and 47.

No new matter has been added by these amendments. Unless specifically stated otherwise, none of these amendments are intended to limit the scope of any claim; Applicant reserves the right to pursue any removed subject matter in a related application.

Examiner Interviews

Applicant thanks Examiner Sang and Examiner Helms for the courtesy of the April 17, 2006, telephone interview with their representatives Tanya Harding, Ph.D. and Anne Carlson, Ph.D. The double-patenting rejection was discussed.

Applicant also thanks Examiner Sang and Examiner Helms for the courtesy of the May 31, 2006, interview with their representatives Tanya Harding, Ph.D. and Anne Carlson Ph.D. (by telephone), as well as the inventor, Michael Emmert-Buck, M.D., Ph.D., and a representative of the licensee, Jonathan Cohen (in person). The novelty, obviousness, and double-patenting rejections were discussed. Examiners Sang and Helms agreed that the proposed amendment of claim 1 to recite that “a two-dimensional architecture of the biological specimen is preserved throughout the transfer” overcomes the rejections under 35 U.S.C. §§102 and 103. In addition, Applicant thanks the Examiners for stating that the obviousness-type double patenting rejection

is withdrawn, based on the discussion during the May 31, 2006, interview. It is believed that this response is filed in accordance with suggestions made during the interviews.

Withdrawal of Claim Rejections

Applicant thanks Examiner Sang for withdrawing the rejections of claims 1-44, 49, and 67-69 under 35 U.S.C. §112, second paragraph in the current action. In addition, Applicant thanks the Examiner for withdrawing the rejection of claims 1-10, 12-21, 24-44, 46-54, 67-69 under 35 U.S.C. §§102(a) and/or 103(a). Finally, Applicant thanks the Examiner for withdrawal of the rejection of claims 44 and 69 under 35 U.S.C. §102(b).

Claim Rejections Under 35 U.S.C. §102

The rejection of claims 1, 2, 42, and 67 under 35 U.S.C. §102(b) as allegedly anticipated by Imai *et al.* (U.S. 5,057,438, issued October 15, 1991) has been maintained. Applicant traverses this rejection, at least for the reasons already on record in this case. However, solely to advance prosecution in this application, claim 1 is amended to recite “wherein a two-dimensional architecture of the biological specimen is preserved throughout the transfer such that the transferred components interacting with the different identification molecules produce a pattern on each of the different capture regions, and wherein the pattern on each capture region corresponds to the location of the components from the biological specimen...” Support for the amendment of claim 1 can be found in the specification at least at page 4, lines 1-2; page 5, lines 4-18 and 24-26; page 23, lines 25-29; and at page 28, lines 14-17. This language was acknowledged by the Examiner during the interview as overcoming this rejection. The following arguments are provided to ensure that the record is complete.

Imai discloses an apparatus containing a laminate of multiple electrophoretic carriers, each having a different species of antibody, wherein the apparatus is used for determining the *concentration* of a protein in a sample by measuring the amount of fluorescence intensity in the membranes (Imai, at column 2, lines 39-57; column 4, lines 14-21). In addition, Imai discloses that sucrose is added to the sample liquid “in an amount calculated to give rise to a 15% sucrose solution” (Imai at column 6, lines 6-8). Thus, the sample disclosed in Imai is a homogeneous liquid sample. Finally, Imai does not disclose that more than one homogeneous sample is

applied to the membrane. There is certainly no teaching in this reference of any sample that has a two-dimensional architecture, nor that such can be maintained and analyzed after transfer.

Imai teaches the application of a *single, homogeneous, liquid sample to a laminate of membranes*, each having a different species of antibody, in order to measure protein *concentration*. Imai does not teach a method of analyzing a biological specimen, wherein (as required by Applicant's claims) "a two-dimensional architecture of the biological specimen is preserved throughout the transfer such that the transferred components interacting with the different identification molecules produce a pattern." A single, homogeneous, liquid sample applied to the membrane in Imai does not have a "two-dimensional architecture," as is required in amended claim 1 and clearly taught in Applicant's specification. The subject application clearly points out that a biological specimen, such as whole mount tissue, intact cells, and an array of cell lysates (see, *e.g.*, specification at page 7, lines 27-28 and Figure 2) has a two-dimensional architecture that is preserved and reproduced throughout the transfer (see, *e.g.*, specification at page 11, lines 15-18).

Further, the method discussed in Imai at best measures protein concentration and does not permit the maintenance and visualization of a pattern that is representative of the *location* of the biological molecules in the biological specimen. Applicant's current claims (*e.g.*, claim 1) specify that "the transferred components interacting with the different identification molecules produce a pattern" and that the pattern "corresponds to the location of the components from the biological specimen." This is neither taught nor reasonably to be extrapolated from the teachings in Imai.

Moreover, the membranes disclosed in Imai are assembled as a *laminate*. Thus, the planar surface of each membrane is not even potentially accessible in order to view a pattern on the membranes. As a result, detection of a pattern of captured components on each layer is made impossible by the method of Imai. Applicant respectfully submits that Imai does not and cannot anticipate amended claim 1.

Claims 2, 42, and 67 depend, directly or indirectly, from claim 1 and incorporate all the limitations thereof. Applicant respectfully requests that the Examiner withdraw the rejection of claims 1, 2, 42, and 67 in light of the amendment of claim 1 and the above arguments. This was agreed to in the interview and acknowledged in the Interview Summary mailed June 6, 2006.

New Claim Rejections Under 35 U.S.C. §112, second paragraph:

Claims 10, 25, 44, 50, 68, and 69 have been rejected under 35 U.S.C. §112, second paragraph because the claims allegedly are indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant traverses this rejection.

Claim 10 is rejected as indefinite because allegedly it is not clear what the phrases “multiple different discrete cellular specimens” and “a correspondence” are referring to. With regard to the phrase “multiple different discrete cellular specimens,” Applicant submits that it would be clear to one of skill in the art that this phrase refers to more than one cellular specimen that are both different and discernable one from the other (see, for example, the specification at page 4, lines 8-12; page 23, lines 8-12; page 25, lines 19-21; Figure 2A; Figure 4A; and Figure 5). Thus, claim 10 is clear with regard to this phrase. Applicant respectfully requests that this rejection of claim 10 be withdrawn, but if further issue remains with regard to this phrase, the Examiner is invited to telephone the undersigned.

With regard to the phrase “a correspondence,” claim 10 has been amended solely to advance prosecution in this case, and now recites that correspondence is maintained “between a position on a surface of the substrate and a position in the substrate to which the component is transferred”. Support for the amendment of claim 10 can be found in the specification at page 6, lines 11-13, for instance. Applicant respectfully requests that this rejection of claim 10 as amended be withdrawn.

Claim 25 is rejected as indefinite because allegedly it is not clear what the term “reacting” means. Applicant traverses this rejection. However, solely to advance prosecution of this application, claim 25 is amended to replace “reacting” with “interacting” so the claim recites

“further comprising interacting an identified component with a second identification molecule.” Support for the amendment of claim 25 can be found in the specification at page 5, lines 12-14. This language appears clear. Applicant submits that the amendment of claim 25 overcomes the rejection, and requests that the rejection be withdrawn.

Claims 44, 50, and 69 are rejected as indefinite because allegedly it is not clear what the term “cytoherent matrix” means. Applicant traverses this rejection. However, solely to advance prosecution of this application, claims 44, 50, and 69 are amended to remove the term “cytoherent.” Support for the amendment of claims 44, 50, and 69 can be found throughout the specification, for example at page 5, lines 19-31. Applicant submits that the amendment of claims 44, 50, and 69 overcomes the rejection, and requests that it be withdrawn.

Claim 68 is rejected as allegedly indefinite because it there is a lack of antecedent basis for the phrase “the cellular specimens.” Claim 68 has been amended to recite “the biological specimens.” Applicant submits that the amendment of claim 68 overcomes the rejection, and requests that it be withdrawn.

New Claim Rejections Under 35 U.S.C. §102

Claims 1-4, 10, 11, 14-18, 20, 21, 24-29, 32-42, and 67 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Christian (EP 0 139 373; published May 2, 1985). Applicant traverses this rejection.

The amended language of claim 1 was acknowledged by the Examiner during the interview as overcoming this rejection. The following arguments are provided to ensure that the record is complete.

Applicant respectfully disagrees with the assertion that the method of analyzing a biological specimen disclosed in Christian anticipates the claimed invention, particularly in light of the amended claims. Christian discusses a multiple immunoassay system comprising a microassay rod adapted for screening biologic fluids for the presence of various analytes. The rod is based on a column of laminated, spaced detection layers with each detection layer

including a known binding agent. Christian also indicates that qualitative and quantitative information can be gained by measuring the attenuation of light passing through each stacked layer within the rod or by measuring the presence of a magnetizable marker within each layer in the rod (see Christian at page 13, line 15 through page 14, line 13; and at page 16, lines 5-28). Finally, the sample solution described in Christian is drawn up over the laminated layers in the column, and “a pulse vacuum source is preferably used to draw the solution up and down in the support tube 26 to *assure complete mixing and agitation*” (Christian at page 12, lines 9-12; emphasis added).

As discussed above, claim 1 of the instant application has been amended to recite that “a two-dimensional architecture of the biological specimen is preserved and reproduced throughout the transfer such that the transferred components interacting with the different identification molecules produce a pattern on each of the different capture regions, and wherein the pattern on each capture region corresponds to the location of the components from the biological specimen.” The method disclosed in Christian teaches the analysis of a single sample solution that is *mixed and agitated* during incubation (making it *homogeneous*). The distinctions between the claimed invention and Christian largely parallel the discussion for Imai: A single, homogeneous, liquid sample applied to the laminated layers in Christian does not and cannot have a “two-dimensional architecture,” as is required in amended claim 1. The components captured by the method disclosed in Christian are qualitatively and quantitatively measured by the *total* amount of light (or analog signal produced by a magnetizable marker) emitted in each layer and, as a result, Christian does not teach any method that would permit detecting a *pattern* of captured components on a layer. Christian discloses that the layers are laminated and therefore a pattern cannot be viewed on the planar surface of the individual layers. As a result, it is not possible to detect a pattern of captured components on each layer using the method taught by Christian. Thus, Christian does not teach Applicant’s claimed method, which provides (*e.g.*, in claim 1) analysis of a biological specimen “wherein a two-dimensional architecture of the biological specimen is preserved and reproduced throughout the transfer such that the transferred components interacting with the different identification molecules produce a pattern on each of the different capture regions, and wherein the pattern on each capture region corresponds to the location of the components from the biological specimen.”

Applicant respectfully submits that amended claim 1 is not anticipated by Christian, nor can Applicant's method reasonably be extrapolated from this reference. Claims 2-4, 10, 11, 14-18, 20, 21, 24-29, 32-42, and 67 depend, directly or indirectly, from claim 1 and incorporate all of the limitations thereof. Applicant respectfully requests that the rejection of claims 1-4, 10, 11, 14-18, 20, 21, 24-29, 32-42, and 67 be withdrawn in light of the current arguments and amendments. This was agreed to in the interview and acknowledged in the Interview Summary mailed June 6, 2006.

New Claim Rejections Under 35 U.S.C. §103(a)

Claims 1-44, 46-54, and 67-69 are rejected under 35 U.S.C. §103(a) as allegedly obvious with respect to Christian, in view of Imai, Okabe *et al.* (*J. Histochem. Cytochem.*, 41(6):927-934, 1993), Olsen *et al.* (*J. Immun.*, 220:77-84, 1998), Manabe *et al.*, (*Anal. Biochem.*, 143:39-45, 1984), Pappalardo *et al.*, (*Seminars in Radiation Oncology*, 8:217-223, 1998), and Huang *et al.* (*Anal. Biochem.*, 268:305-317, 1999). Applicant traverses this rejection, in all possible forms.

The amended language of claim 1 was acknowledged by the Examiner during the interview as overcoming this rejection. The following arguments are provided to ensure that the record is complete.

The Office action at page 14 specifically refers to the teachings of Christian, as they are alleged to apply to claims 1-4, 6, 10, 11, 14-18, 20, 21, 24-29, 32-43, and 67 (not to claims 1-44, 46-54, and 67-69) and that the deficiencies in Christian are made up by the teachings of Imai, Okabe *et al.*, Olsen *et al.*, Manabe *et al.*, Pappalardo *et al.*, and Huang *et al.* Thus, Applicant understands that this rejection under 35 U.S.C. §103(a) applies to claims 1-4, 6, 10, 11, 14-18, 20, 21, 24-29, 32-43, and 67.

Applicant notes that the Office action on pages 14-16 describes the elements disclosed in each of the cited references that allegedly make up the deficiencies of Christian. However, this is a mere list of elements. It is not clear to Applicant which elements are combined and how the combination of seven references is being applied to each of claims 1-4, 6, 10, 11, 14-18, 20, 21,

24-29, 32-43, and 67. In addition, there is no specific allegation or argument provided in the Office action that it would be *prima facie* obvious to modify the method disclosed in Christian, in view of the combined teachings of Imai, Okabe *et al.*, Olsen *et al.*, Manabe *et al.*, Pappalardo *et al.*, and Huang *et al.* Applicant is forced to assume that the text at page 12-16 of the Office action is provided to establish the groundwork for specific rejections set forth in paragraph 18. Applicant has addressed the rejections thus; if the Examiner has any concerns, please telephone the undersigned so the rejections can be discussed further.

At least three basic requirements must be met to establish a *prima facie* case of obviousness. First, the Office must show how the prior art reference must have all of the limitations of the claims. M.P.E.P. § 2143.03. Second, the Office must establish that there was a motivation to modify the reference or combine the teachings to produce the claimed invention. M.P.E.P. § 2143.01. Third, the Office must demonstrate that there was a reasonable expectation of success for achieving the invention in the prior art. M.P.E.P. § 2143.02. The teaching or suggestion to combine and the expectation of success must both be found in the prior art and not based on an Applicant's disclosure. M.P.E.P. § 2142.

Imai or Christian in view of Okabe et al., Pappalardo et al., and Huang et al.

The Office action at page 16 alleges that it would have been *prima facie* obvious to one skilled in the art at the time the invention was made to have modified the methods of Imai *or* Christian by analyzing tissue sections, using laser capture microdissection, or mass spectroscopy sequencing in view of the teachings of Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* Applicant respectfully traverses this rejection.

In order for the Office to establish a proper *prima facie* case of obviousness, the Office must show how the cited references disclose each and every limitation of the claims. As discussed above, neither Imai nor Christian teach all of the limitations of amended claim 1. Both Imai and Christian disclose a method of measuring the amount (concentration) of a component(s) within a single, homogenous liquid sample that is applied to laminated membranes containing binding agents. Because the methods disclosed in Imai and Christian rely upon the use of laminated membranes, these methods can at best provide the total concentration of protein in a

membrane and it is not possible to view a two-dimensional pattern on the planar surface of individual membranes. Thus, neither Imai nor Christian teach at least the following limitations of amended claim 1: detection of a *pattern* (of a subset of the components) *on each of the different capture regions*. These deficiencies of the base references are not made up for in any of the secondary references relied upon in the Office action.

Okabe *et al.* teaches a method for direct transfer of native proteins from unfixed frozen tissue sections to a *single* membrane, wherein the membrane can be precoated with ligands, etc., in order to more selectively bind macromolecules from the tissue. Pappalardo *et al.* teaches the isolation of tissue by laser capture microdissection. Huang *et al.* teaches at best a method for obtaining sequence information directly from mixtures or as an adjunct of peptide mass mapping to provide protein identification. Neither Okabe *et al.*, Pappalardo *et al.*, nor Huang *et al.* teach a method to detect a *pattern* (of a subset of the components) *on each of the different capture regions*. Thus, these references do not overcome the deficiencies of Imai or Christian.

The mere potential that Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* each separately disclose one limitation that is missing from Imai or Christian (which Applicant does not admit) is not sufficient to establish a *prima facie* case of obviousness. The Office must show that there was a motivation to combine or alter the teachings of the references to produce the claimed invention. M.P.E.P. § 2143.01. The Office must also demonstrate that there was a reasonable expectation of success for achieving the invention in the prior art. M.P.E.P. § 2143.02. Simply stating that the methods disclosed in Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* “have been used successfully by each of them” (Office action at page 17) is not sufficient to establish that there was a reasonable expectation of success that the technologies disclosed in Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* would have worked when combined with the specific methods disclosed in Imai or Christian. The expectation of success must be found in the prior art and not based on an Applicant’s disclosure. M.P.E.P. §2142.

Applicant submits that as the technologies disclosed in Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* are very different from the methods taught in Imai and Christian. Thus, there would have been no motivation to combine and no reasonable expectation of success that one of

skill in the art could combine the methods described in Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.* with the methods described in Imai or Christian to arrive at the method of amended claim 1. Applicant points out that once a problem is known, the solution is often obvious. However, recognizing the problem is often not obvious. The only way to get from the disparate teachings of the cited references to Applicant's invention is through impermissible hindsight, based on the Applicant's disclosure. In particular, it appears that at page 17 of the Office action, such hindsight is used to infer the motivation to combine based on Applicant's teachings.

Even if Imai or Christian is impermissibly combined with Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.*, Applicant notes an important difference between Okabe *et al.* and Applicant's invention. Okabe *et al.* teaches the use of multiple individual blotted membranes, each of which is analyzed with a different primary antibody (Okabe *et al.*, page 928, left column, last paragraph). Moreover, Okabe *et al.* teaches that biomolecules are blotted (transferred) onto each individual membrane from separate (sequential), different tissue sections (Okabe *et al.*, page 928, left column, last paragraph). In addition, Okabe *et al.*, states that "proteins bind to the immobilizing matrix when the intracellular fluids permeate *through* the dry membrane" (Okabe *et al.*, page 931, left column, first paragraph; emphasis added). Conversely, Applicant transfers biomolecules from a *single* biological specimen *through a plurality* of membranes. As Okabe *et al.* teaches that the biomolecules bind to but do not permeate through the membrane with the intracellular fluids, and that each membrane to be analyzed must be derived from a different tissue section, Okabe *et al.* teaches away from transferring components of a *single* biological specimen *through a plurality* of different capture regions, as required by amended claim 1 (and the claims that depend therefrom). Based on the fact that Okabe *et al.* teaches away from the claimed invention, Applicant further submits that it is not possible to combine Imai or Christian with Okabe *et al.*, Pappalardo *et al.*, and Huang *et al.*

Imai or Christian in view of Manabe et al.

The Office action alleges at page 17 that it would have been *prima facie* obvious to have modified the methods of Imai or Christian by varying the concentration of the gel to selectively transfer components of different molecular size in view of the teachings of Manabe *et al.* Applicant notes that no specific claims are identified with respect to this rejection. Variation of

gel concentration is recited in claims 22, 23, and 35, all of which depend indirectly from claim 1. Thus, Applicant will address this rejection as it applies to claims 22, 23, and 35, as these claims incorporate all limitations of claim 1. Applicant respectfully traverses this rejection.

Manabe *et al.*, even when combined with Imai or Christian, does not teach or suggest all of the elements of amended claim 1, or any of the claims depending therefrom. As discussed above, neither Imai nor Christian teach all of the limitations of amended claim 1; these deficiencies are not made up for by Manabe *et al.* Both Imai and Christian disclose a method of measuring the amount (concentration) of a component(s) within a single, homogenous, liquid sample that is applied to laminated membranes that contain binding agents. Neither Imai nor Christian teach a method that analyzes a tissue section or dissected intact cells (biological specimen) by detecting a *pattern* (of a subset of the components) *on each of the different capture regions*, as required by amended claim 1 (and incorporated in claims 22, 23, and 35).

Manabe *et al.* disclose a method for the electrophoretic transfer of proteins from a polyacrylamide gel to a *single* nitrocellulose blot that is replaced at regular intervals in order to obtain *replicas* of the sample. Manabe *et al.* does not disclose that the blots contain capture molecules. In addition, there is no teaching in Manabe *et al.* that would enable detection of a *pattern* (of a subset of the components) *on each of the different capture regions*, as required by amended claim 1, and the claims that depend therefrom. Thus, Manabe *et al.* does not overcome the deficiencies of Imai or Christian.

Christian in view of Imai and Olsen et al.

The Office action alleges at page 17 that one would have had a motivation to modify the method of Christian by using a substrate having contiguous layers with capillary transfer or electro-transfer. The Office action also alleges at page 18 that one would have had a reasonable expectation of success at the time the invention was made to transfer samples using contiguous layered substrates and capillary transfer or electro-transfer because both Imai and Olsen teach a method of transferring samples using multiple contiguous layers using capillary transfer and electrophoresis. Applicant notes that no specific claims are identified with respect to this rejection. “Contiguous layers” and “capillary transfer” language is recited in claims 5 and 6, and

“electrophoresis” is recited in claim 7, all of which depend indirectly from claim 1. Thus, Applicant will address this rejection as it applies to these claims, as they incorporate the limitations of claim 1. Applicant respectfully traverses this rejection.

As discussed during the interview, and for the Examiner’s convenience, Applicant provides the following definition of “contiguous,” as recited in *The American Heritage Dictionary of the English Language*, Fourth Edition, Houghton Mifflin Company, Boston, 2000:

1. Sharing an edge or boundary; touching.
2. Neighboring; adjacent.

Applicant would be happy to provide the Examiner with a photocopy of the relevant page from this dictionary upon request.

Olsen *et al.*, combined with Imai and Christian, do not teach or suggest all of the elements of amended claim 1, or any of the claims depending therefrom. As discussed above, neither Imai nor Christian teach all of the limitations of amended claim 1. Both Imai and Christian disclose a method of measuring the amount (concentration) of a component(s) within a single, homogenous liquid sample that is applied to laminated membranes that contain antibodies. Neither Imai, nor Christian teach a method that analyzes a tissue section or dissected intact cells (biological specimen) by detecting a *pattern* (of a subset of the components) *on each of the different capture regions*, as required by amended claim 1 (and incorporated in claims 5-7).

Olsen *et al.* disclose a method for the electrophoretic or capillary transfer of proteins from polyacrylamide gels to nitrocellulose blots in order to obtain replicas of the sample. Olsen *et al.* does not disclose that the blots contain capture molecules. In addition, there is no teaching in Olsen *et al.* that would enable detection of a *pattern* (of a subset of the components) *on each of the different capture regions*, as required by amended claim 1, and the claims that depend therefrom. Thus, Olsen *et al.* does not overcome the deficiencies of Imai and Christian.

Applicant further submits that the Office has not successfully established that there would have been a motivation to modify the references or combine the teachings to produce the claimed invention, or that there was a reasonable expectation of success for achieving the claimed invention in the prior art. Simply making a statement that there was a motivation to combine or that there was a reasonable expectation of success without providing more is not sufficient to establish a proper *prima facie* case of obviousness. When motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986) M.P.E.P. §2142. The teaching or suggestion to combine and the expectation of success must both be found in the prior art and not based on an Applicant's disclosure. M.P.E.P. §2142. It is impermissible hindsight to infer the motivation to combine based on the teachings of the Applicant's disclosure, as it appears has been done in the instant case.

In conclusion, the Office has failed to make any proper *prima facie* case of obviousness with respect to claim 1, as well as with respect to all of the claims dependent therefrom. Even if it were to be admitted that some combination of the cited references singly or in any combination teaches all of the limitations of the claims (and it is not so admitted), the Office action has failed to demonstrate that (i) there was a suggestion or motivation to modify the references and (ii) that there was an expectation of success. Without meeting these requirements, no *prima facie* case of obviousness has been established. In addition, Okabe *et al.* teaches away from the Applicant's invention. Accordingly, Applicant requests that the rejection be withdrawn.

Alleged Nonstatutory Obviousness-Type Double Patenting

Claims 1-6, 8-21, 24, 32-37, 40-42, 44, 46-54, 67, and 69 are rejected on the grounds of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1-7, 12-14, 16, 19, 21, 23-27, and 30-32 of U.S. Patent No. 6,602,661 (hereinafter the '661 patent) in view of Christian. Applicant traverses this rejection.

As discussed during the May 31, 2006, examiner interview, and acknowledged in the Interview Summary mailed June 6, 2006, the obviousness-type double patenting rejection "is withdrawn because the patent [U.S. Patent No. 6,602,661] teaches multiple imprinting of a

biological sample. The instant claims are drawn to a method of transferring biological sample through multiple layers, wherein each layer has different probes, therefore only the molecule which binds the probe is captured.” Applicant thanks the Examiner for withdrawing this rejection.

Conclusions

Based on the foregoing amendments and arguments, the claims are in condition for allowance and notification to this effect is requested. If for any reason the Examiner believes that a telephone conference would expedite allowance of the claims, please telephone the undersigned at (503) 595-5300.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By /Anne Carlson/
Anne Carlson, Ph.D.
Registration No. 47,472

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 595-5300
Facsimile: (503) 228-9446